



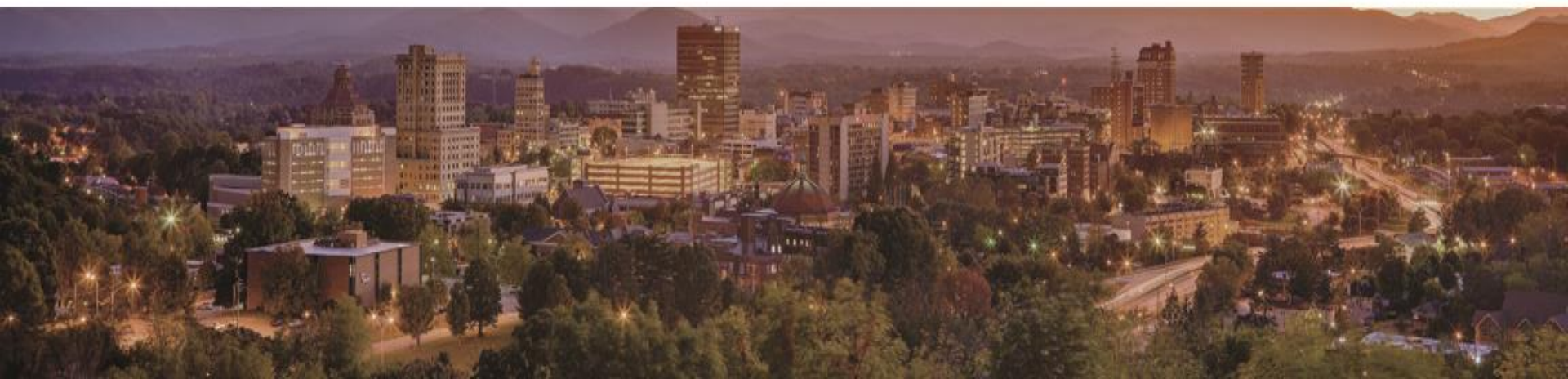
March 4, 2016



NCDOT - Division of Aviation

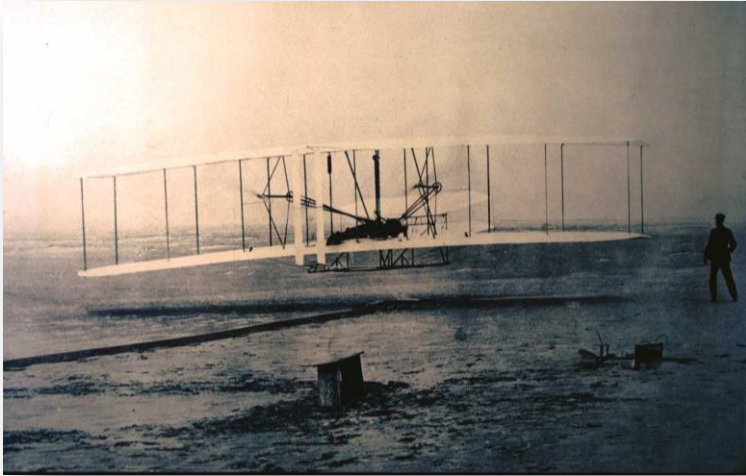
Bobby Walston, NCDOT, Division of Aviation Director

John Lennon, NCDOT Board of Transportation Member



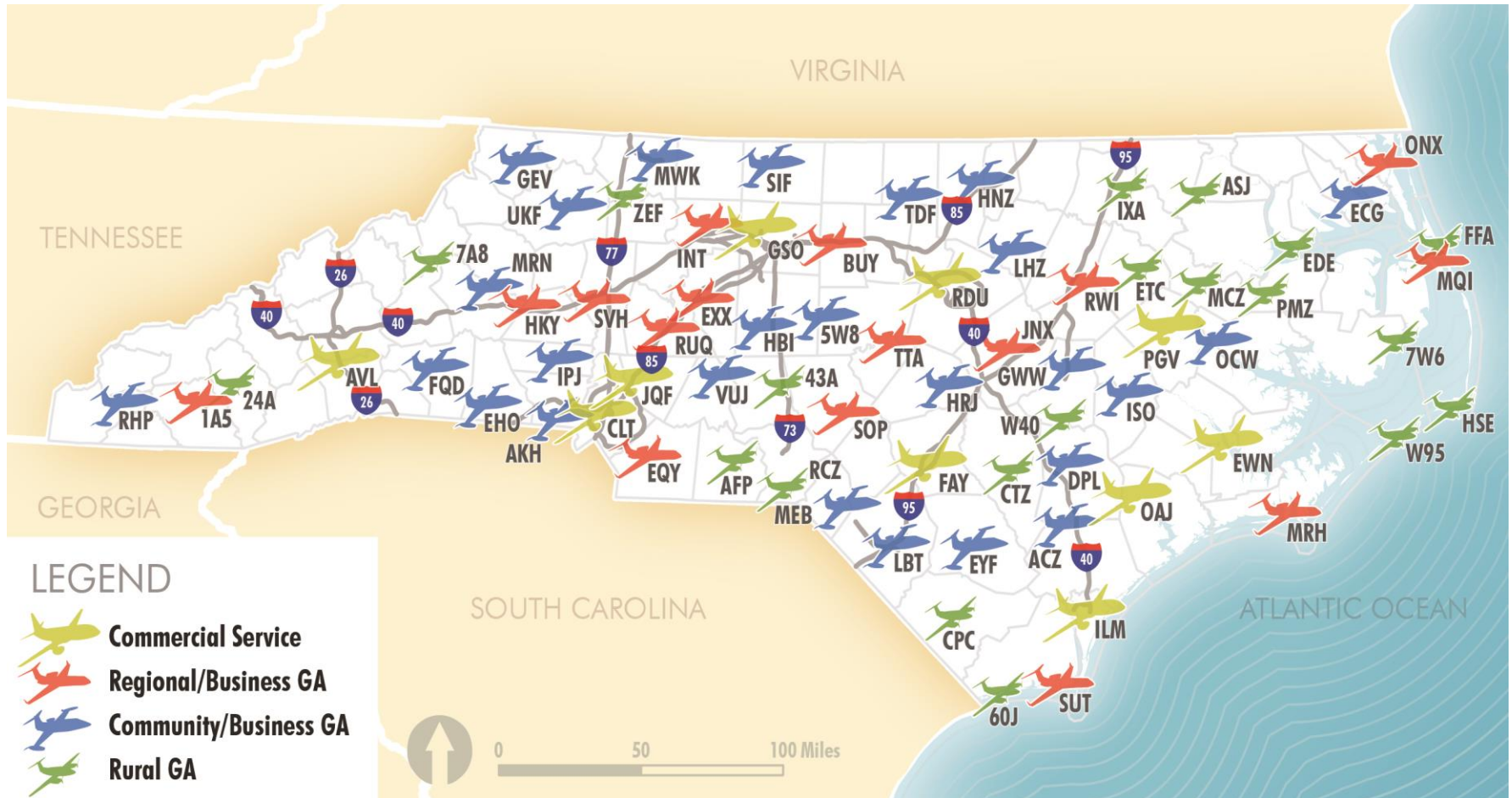
North Carolina Aviation

First in Flight



North Carolina's Aviation System

72 Publicly Owned Airports in North Carolina



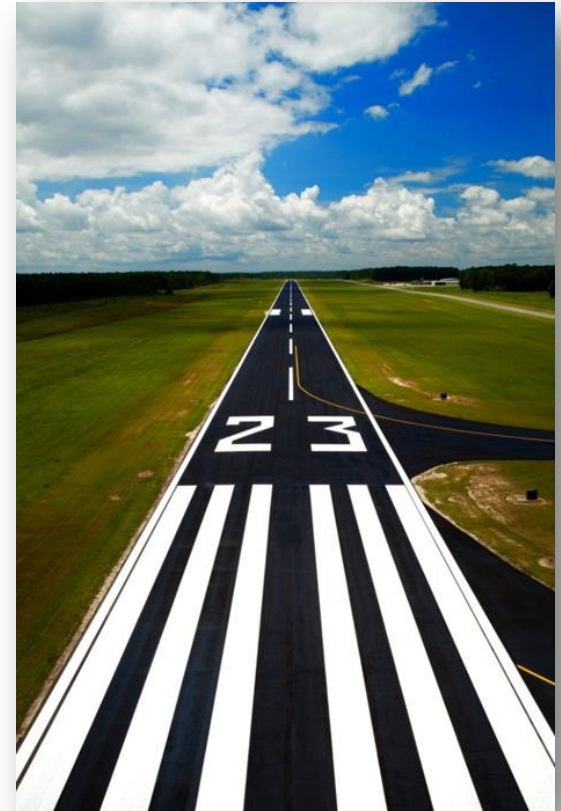
Aviation in North Carolina

Annually:

- 28.4 million total passenger enplanements
- 3.2 million total aircraft operations
- Over 1.3 billion pounds of air cargo

Pilots, Aircraft and Mechanics

- 17,760 Pilots
- 6,987 Aircraft (625 Business Aircraft)
- 18,702 Mechanics



Annual Economic Contribution of NC's System of Publically Owned Airports

Commercial and General Aviation
Airports provide more than
\$31.1 billion in economic impact
each year.



Source: NC State University, Institute for Transportation Research and Education, 2016



Annual Economic Contribution of NC's System of Publically Owned Airports

- Commercial and General Aviation Airports support over **123,000 jobs** throughout North Carolina.
- Commercial and General Aviation Airports support jobs which result in more than **\$4.1 billion** in personal income.



Source: NC State University, Institute for Transportation Research and Education, 2016



Annual Tax Revenues collected because of NC's System of Publically Owned Airports

State and local governments received more than **\$910 million** in sales, property, corporate, and personal taxes due to airport activity.

- **\$550 million** in state tax revenue related to business activity.
- **\$360 million** in local tax related to airport business activity.



Source: NC State University, Institute for Transportation Research and Education, 2016



Aerospace Manufacturing Industries in NC

- NC aerospace manufacturing industries provide more than **\$10.5 billion** in economic impact each year.
- NC aerospace manufacturing industries support over **42,600 jobs** throughout North Carolina.
- NC aerospace manufacturing industries support more than **\$3 billion** in personal income for aviation-related jobs.



Source: NC State University, Institute for Transportation Research and Education, 2016

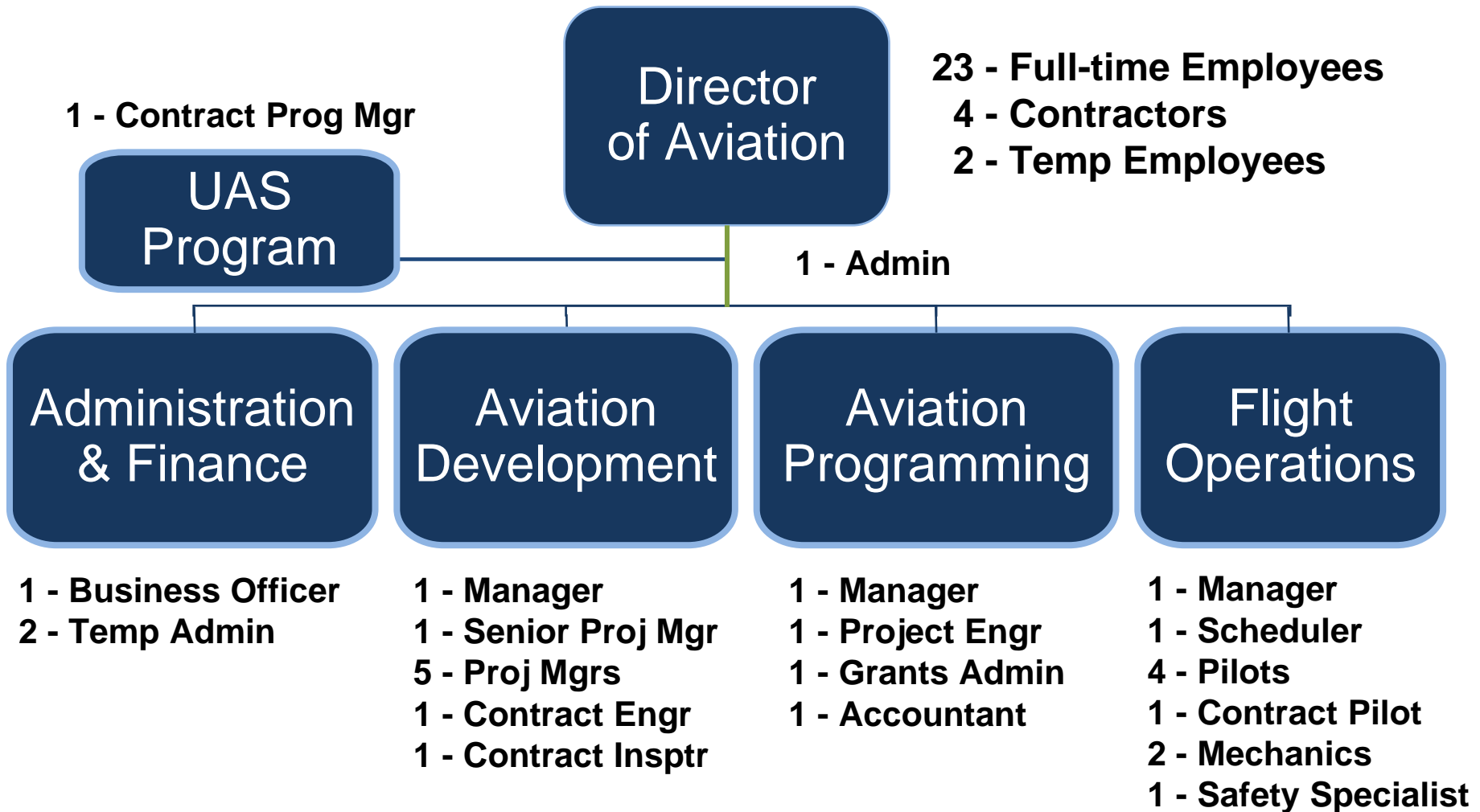
Division of Aviation Core Functions

Provide:

- Aviation Safety and Education Programs
- State and Federal Airport Grant Programs
- Air transportation, operations, and support for state agencies
- Management of the state's Unmanned Aircraft System Program



Organization Chart



FY 2016 State Funding

Total SFY2016 Aviation Budget
\$38,260,952

Specified Projects

\$3,500,000 for Airport Improvement at Cape Fear Regional Jetport

\$2,000,000 toward a new Air Traffic Control Tower at Albert J Ellis Airport

Specified Programs

\$2,500,000 in support of the NC Unmanned Aerial Systems (UAS) Program



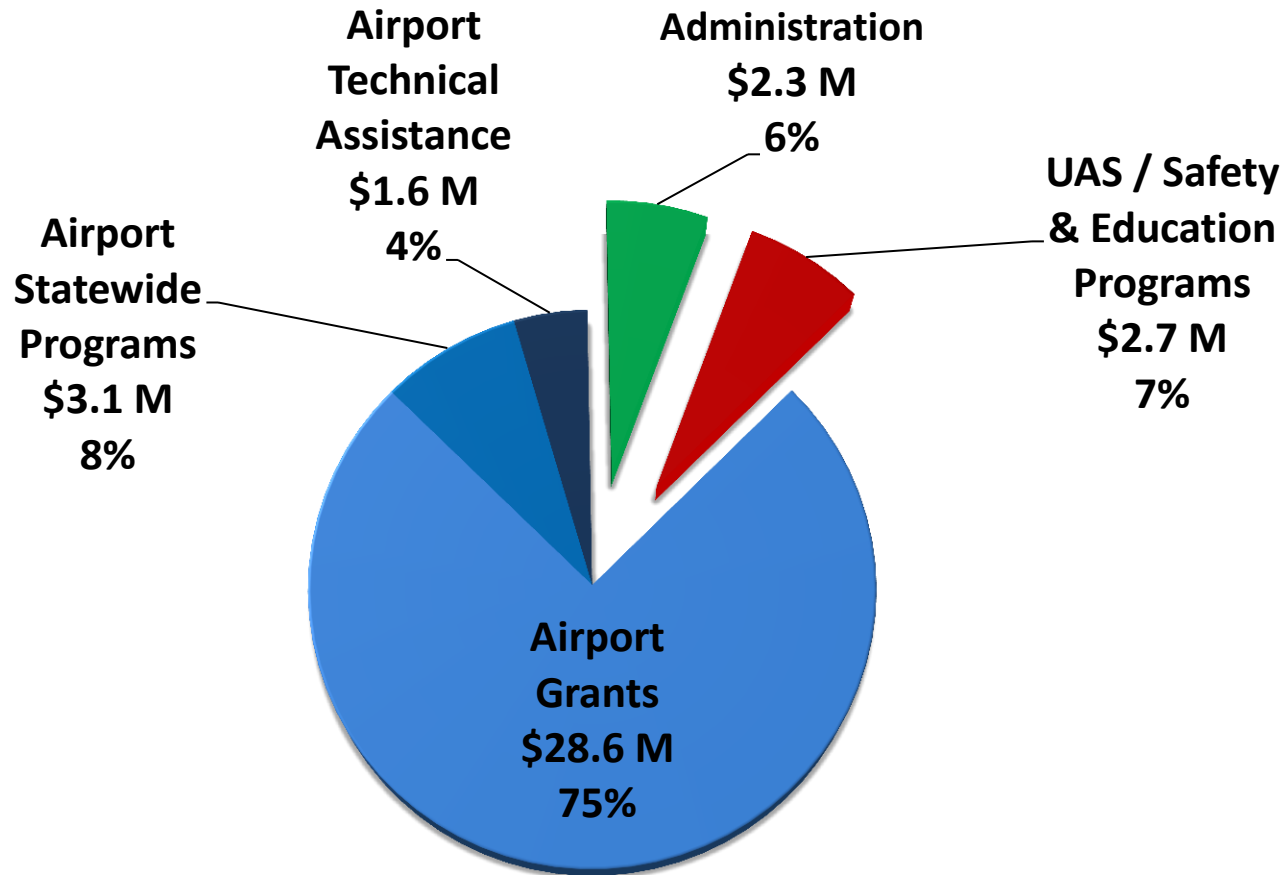
Aviation SFY 2016 Fund Allocation

Airport Grants	\$28.6 M
Commercial Service and General Aviation Airport Grants	
Airport Statewide Programs	\$3.1 M
Safety Preservation & Maintenance, Automated Weather Observation Stations, Wildlife Hazard Management, Safety Inspections	
Airport Technical Assistance	\$1.6 M
Project Managers (salary, benefits, travel) and Professional Services Contracts	
UAS / Safety & Education Programs	\$2.7 M
Unmanned Aircraft System, Aviation (Pilot Proficiency, Aircraft Mechanics, and Youth Events & Camps)	
Administration	\$2.3 M
Staff, Facilities, and Flight Department	
Total	\$38.3 M

Source: NCDOT – Division of Aviation

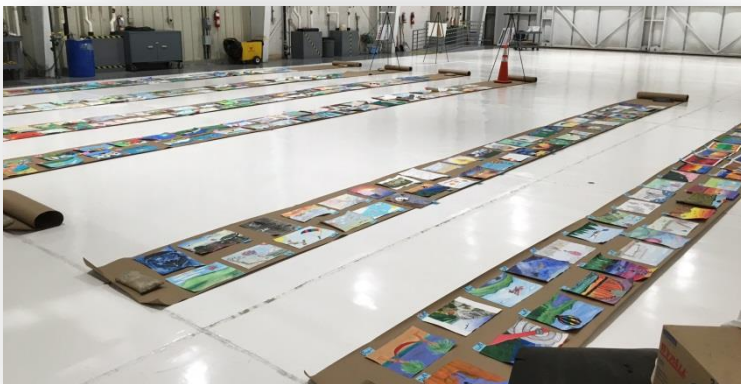


Aviation SFY 2016 Fund Allocation



Aviation Safety & Education

- Conducts pilot and aircraft mechanic safety seminars
- Promotes aviation education and career opportunities
- K-12, college, and specialty programs



NCDOT Flight Operations Aircraft Fleet



2007 King Air 200
9 Passengers



2007 King Air C90
Photogrammetry or 6 Passengers



1998 S-76 Helicopter
7 Passengers
For Sale



1998 Citation Bravo
8 Passengers
For Sale



Types of Flight Missions

Mission Specific:

- Photogrammetry Operations
- Emergency and Safety Operations
- Maintenance and Training Operations

Passenger:

- State Officials Support
- Commerce Support
- Governor's Office
- State Universities



2015 Flight Operations Accomplishments

- Improved cost recovery by implementing higher aircraft rates and lower fuel and insurance cost
- Overall flight utilization was up 21% from previous year
- Established MOA with UNC Medical Air Operations improving flight efficiencies and aircraft utilization
- 100% passenger satisfaction
- Provided over 30 scheduled aviation safety briefings across the state



NC UAS Program Office



NC UAS Program Office

**Unmanned Aircraft Systems in
NORTH CAROLINA**


**NORTH CAROLINA
GENERAL STATUTES**

Session Law 2014-100
Updated in Session Law 2015-232

While this is a summary of Session Law 2014-100 & 2015-232 relating to UAS operations, other General Statutes apply to UAS operations within North Carolina.

- Surveillance:** It is illegal to use UAS to take or distribute images of a person or their home without their consent. (NC GS § 15A-300.1 and NC GS § 14-401.25)
- Special Imaging:** Special imaging technology can only be used for specific missions, including but not limited to scientific research, surveying, and agricultural uses. (NC GS § 15A-300.1 and NC GS § 14-401.25)
- Weapons:** Attaching a weapon to a UAS is a class E felony. (NC GS § 14-401.24)
- Hunting and Fishing:** You may not use a UAS to disrupt wildlife resources or the lawful taking of wildlife. It is also against the law in NC to use a UAS in the process of taking wildlife resources. (NC GS § 14-280.3)
- Interference with Manned Flights:** You may not damage, disrupt the operation of, or otherwise interfere with manned flights. (NC GS § 14-280.3)
- Launch/Recovery Sites:** It is illegal to launch or recover your UAS from either private or public property without explicit consent of the property's owner. (NC GS § 15A-300.2)
- Knowledge Test:** To fly in North Carolina, you must pass the NCDOT's UAS Knowledge Test to ensure your safety and the safety of those around you. (NC GS § 63-96)
- Permit:** With the passing of the Knowledge Test as a prerequisite, commercial operators may request an NC UAS permit from the NCDOT Aviation Division. (NC GS § 63-96)

For more information, visit
www.ncdot.gov/aviation/UAS


 **DIVISION OF AVIATION**
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

**Unmanned Aircraft Systems in
NORTH CAROLINA**

HOBBYIST GUIDELINES
Rules for flying hobbyist or recreational drones

- ☒ Must fly below 400 feet
- ☒ Must fly within your line of sight
- ☒ Do not fly within 5 miles of an airports, above stadiums, or above other public events
- ☒ Do not fly for compensation
- ☒ Aircraft must weigh less than 55 lbs
- ☒ Do take lessons before flying

For more information, visit
www.ncdot.gov/aviation/uas
www.faa.gov/uas
www.knowbeforeyoufly.org

 **DIVISION OF AVIATION**
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



ncdot.gov/aviation/uas/

New NC UAS Website

- Includes a NC UAS Knowledge Test
- Commercial and Government UAS Operator's Permits can be acquired online
- UAS Safety Guide and NC Statutes
- Helpful Links

ncdot.gov/aviation/uas/

UAS Operator Permitting
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UAS Home Page | Division of Aviation

Business DMV Newsroom Programs Projects Travel & Maps

Division Of Aviation » Unmanned Aircraft Systems » Knowledge Test & Operator Permitting

Start Knowledge Test

Do you know the requirements to fly a drone in North Carolina?

Download the Study Guide to learn North Carolina's rules and regulations. Take the Knowledge Test to challenge yourself (recreational operators) or to apply for an operator permit (commercial and government operators).

[Download Study Guide](#)

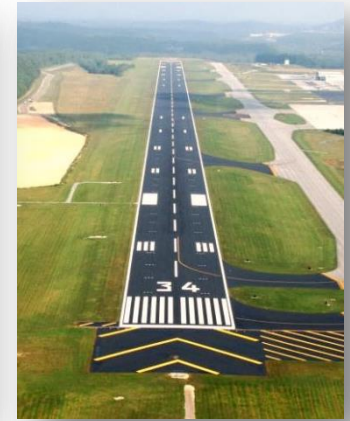
[Start Knowledge Test](#)

BEFORE YOU BEGIN
Requirements for Operator Permitting in North Carolina

Commercial	Government Operations	Recreational
<ul style="list-style-type: none">✓ Obtain a Section 333 Exemption from the Federal Aviation Administration (FAA).✓ Alternatively, a Special Airworthiness Certificate can be obtained from the FAA.✓ Operator must pass the NCDOT UAS Knowledge Test.✓ Operator must have a valid Driver License.✓ Operator must have a valid Airman Certificate or a sponsor with valid Airman Certificate. <p>More Information</p>	<ul style="list-style-type: none">✓ Obtain a Certificate of Authorization from the Federal Aviation Administration (FAA).✓ Operator must pass the NCDOT UAS Knowledge Test.✓ Operator must have a valid Driver License. <p>More Information</p>	<ul style="list-style-type: none">✓ Recreational UAS/drone operators are not required to obtain a permit from the Division of Aviation.⚠ Recreational operators are required to register their UAS through the FAA's UAS Registration Service. <p>More Information</p>

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Airport Grants



Airport Statewide Programs



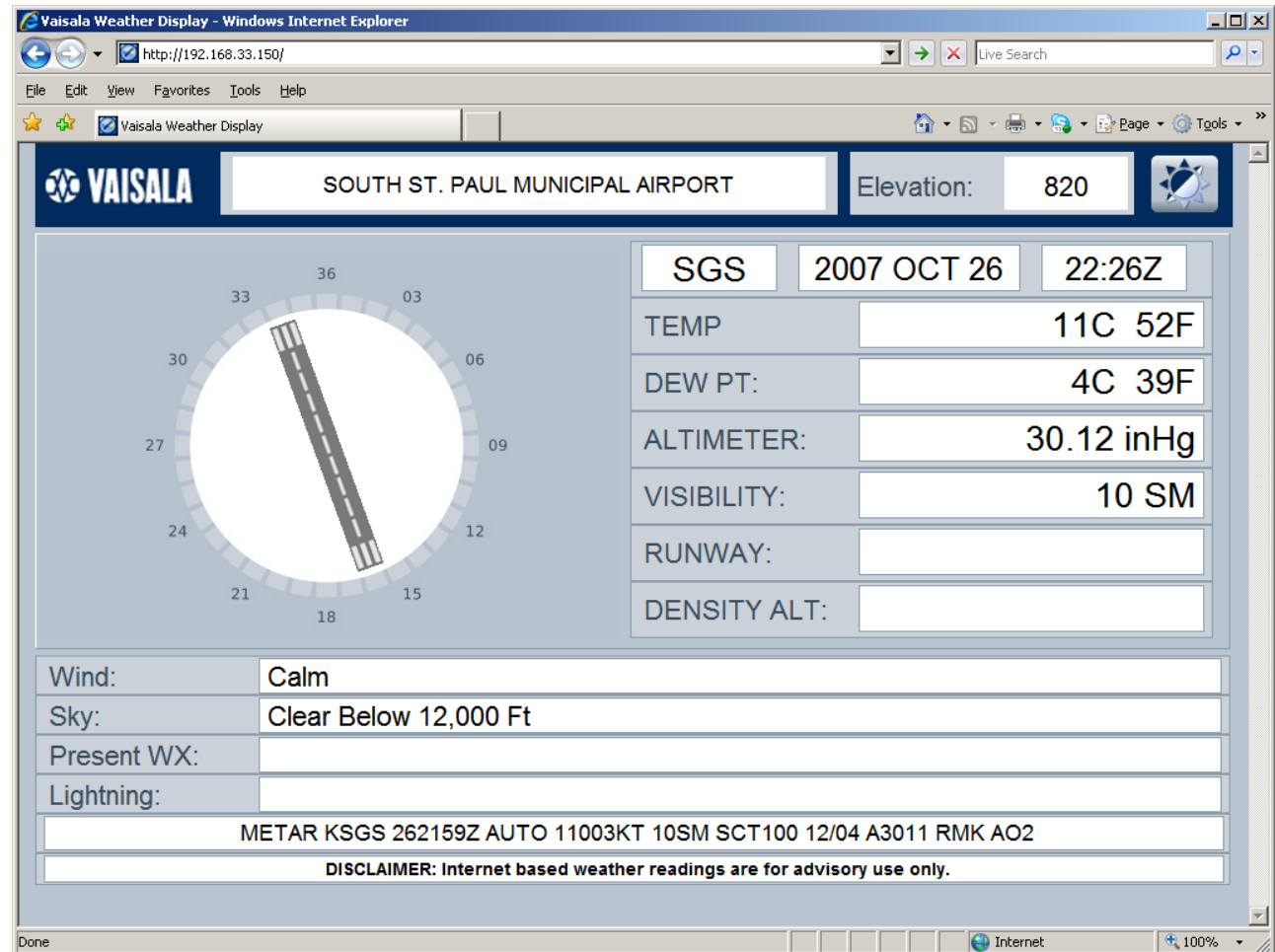
Airport Safety Preservation (Maintenance Program)



Automated Weather Observation Station (AWOS) Program

47 systems
across the
state

Provides real
time weather
observations
via VHF and
phone
connections
to pilots and
the public



Wildlife Hazard Mitigation Program

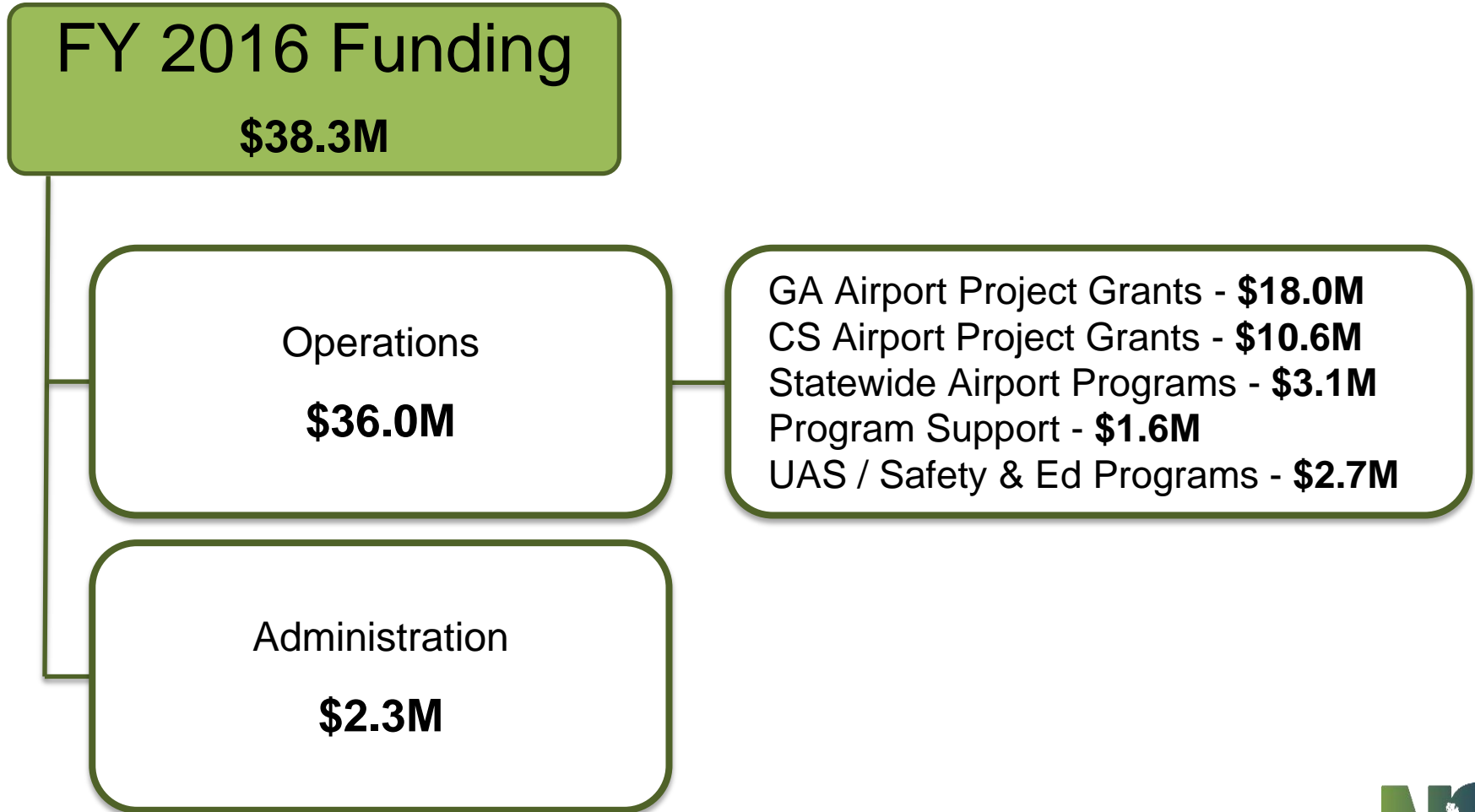


Work in conjunction with USDA Wildlife Services to address wildlife issues at airports

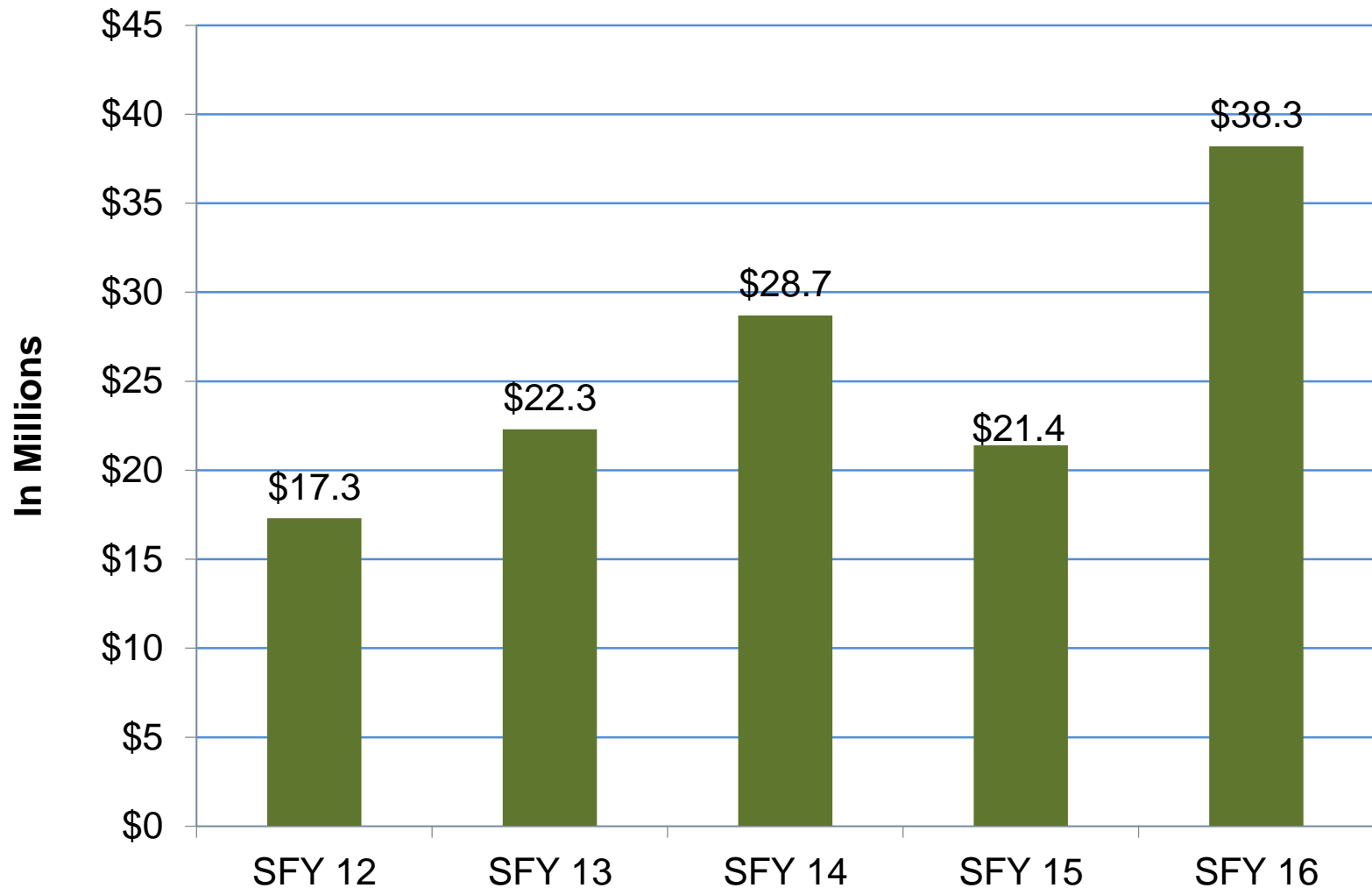
- Wildlife Hazard Assessments
- Site Visits
- Training Days
- Wildlife Hazard Management Plans



State Funding



State Funding (in millions) SFY 2012-2016



STI Legislation

- All capital expenditures, regardless of mode, will be funded from Highway Trust Fund.
- All modes must compete for the same funds.
- Projects (regardless of mode) will be scored on a 0-100 point scale.
- Local Input will be part of the scoring criteria for all Regional Impact and Division Needs projects.
- Operations and Maintenance expenditures will be funded from the Highway Fund.



Eligibility Definitions – Highways

	Statewide	Regional	Division
Highway	<ul style="list-style-type: none">• Interstates and Future Interstates• Routes on the NHS as of July 1, 2012• Routes on Department of Defense Strategic Highway Network (STRAHNET)• Appalachian Development Highway System Routes• Uncompleted Intrastate projects• Designated Toll Facilities	<ul style="list-style-type: none">• Other US and NC Routes	<ul style="list-style-type: none">• All SR Routes



Eligibility Definitions – Non Highways

	Statewide	Regional	Division
Aviation	Large Commercial Service Airports. Funding not to exceed \$500K per airport project per year	Other Commercial Service Airports not in Statewide. Funding not to exceed \$300K per airport project per year	All Airports without Commercial Service. Funding not to exceed \$18.5M for airports within this category
Bicycle-Pedestrian	N/A	N/A	All routes
Public Transportation	N/A	Service spanning two or more counties and serving more than one municipality. Funding amounts not to exceed 10% of regional allocation.	Service not included on Regional. Multimodal terminals and stations serving passenger transit systems
Ferry	N/A	State maintained routes, excluding replacement vessels	Replacement of vessels
Rail	Freight Capacity Service on Class I Railroad Corridors	Rail service spanning two or more counties not included on Statewide	Rail service not included on Statewide or Regional



STI – Classification of Airports

Statewide Mobility– Commercial Service Airports

- International Service or 375,000 enplanements
- Federal Aviation Administration's National Plan of Integrated Airport Systems (NPIAS)
- \$500,000 per airport per project per year
- Charlotte Douglas International Airport, Raleigh Durham International Airport, Piedmont Triad International Airport, Wilmington International Airport

Regional Impacts – Commercial Service Airports

- NPIAS airports that are not included in subdivision (1) of this section
- \$300,000 per airport per project per year
- Asheville Regional Airport, Albert J. Ellis Airport, Coastal Carolina Airport, Concord Regional Airport, Pitt-Greenville Airport, Fayetteville Regional Airport

Division Needs – General Aviation Airports

- NPIAS airports that are not included in subdivision (1) or (2)
- General Aviation airports
- Statewide total funding not to exceed \$18,500,000



FY 2016-20 Aviation STI Projects

Tier	Quantity	Cost
Statewide Mobility	9	\$4.5 M
Regional Impact	5	\$1.5 M
Division Needs	15	\$22.2 M
Total	29	\$28.2 M

Note: STI funds Capital Projects only



FY 2016 Aviation STI Projects

Tier	Quantity	Cost
Statewide Mobility	2	\$1.0 M
Regional Impact	-	-
Division Needs	5	\$5.4 M
Total	9	\$6.4 M

Note: STI funds Capital Projects only



Federal Funding

FFY 2015 Funding

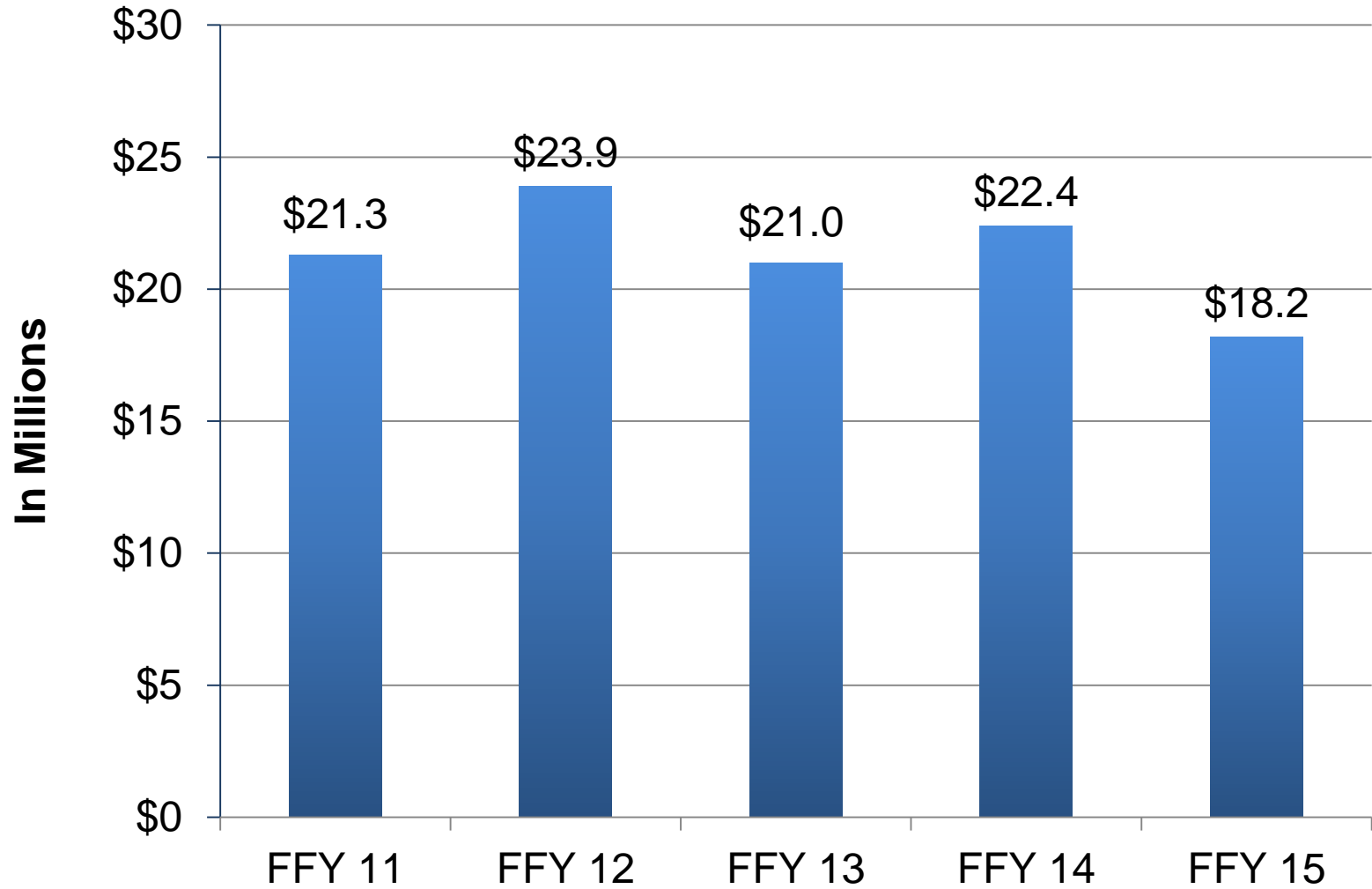
NC Block Grant Program
administered by the Division of
Aviation to 62 GA Airports:
\$18.3M

- Apportionment - **\$5.7M**
- Discretionary - **\$3.4M**
- Non-Primary Entitlement - **\$9.2M**

Airport Improvement Program
(AIP) administered by FAA to 10
Commercial Service Airports:
\$52.2M



FAA State Block Grants FFY 2010-2015



NC Airports Working Group

- Established to identify opportunities for improvement of existing programs and services
- Creating and implementing tools to better serve state, regional, and local needs



Current Airport Project Requests

- Current Project Requests directly from the airports
890+ projects totaling over \$1.6 billion
- Project Requests submitted for consideration in STI
175 projects totaling over \$611 million
- Project Requests submitted for Operations & Maintenance
300+ projects totaling over \$680 million

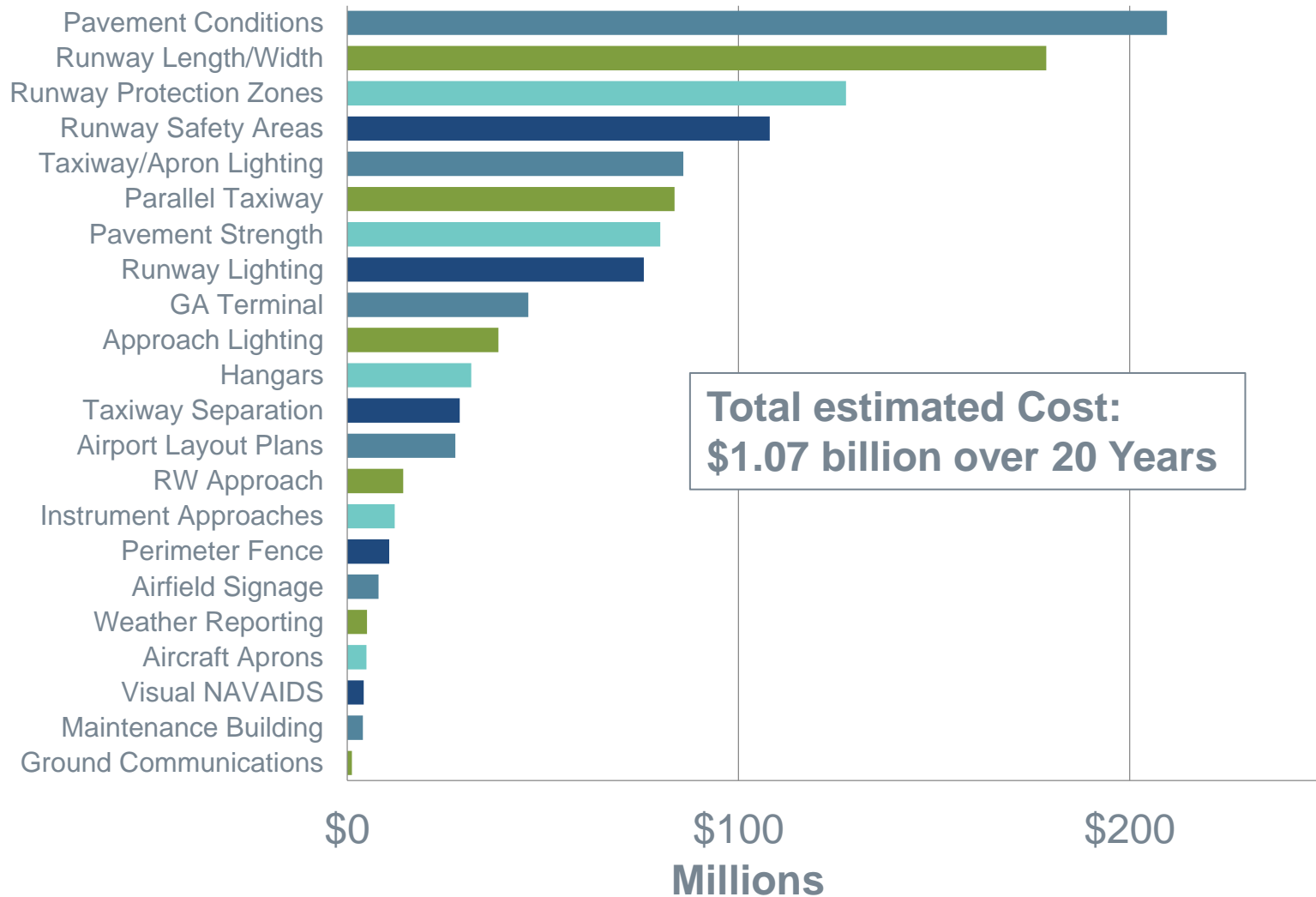


2014 NC Airports System Plan Study

- Top-down analysis of our airport system
- Comprehensive inventory of each airport's assets in our state system
- 20-year forecast applied to all GA and smaller CS airports
- Established Performance Measures and System Objectives for all eligible project categories



Cost by Airport Development Plan Category for GA Airports

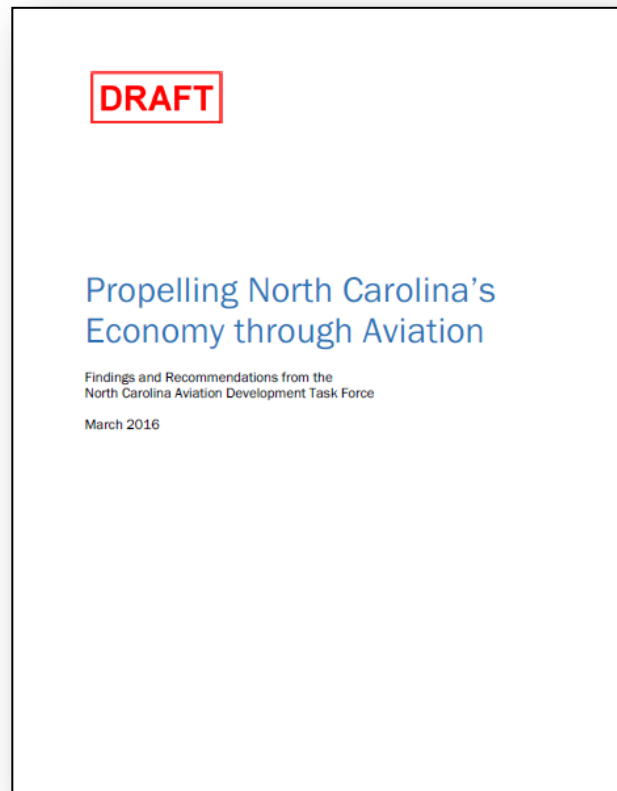


Source: 2014 North Carolina Airports System Plan Update



NC Aviation Development Task Force

The governor directed the Task Force to submit a comprehensive report and recommendations to the secretary of transportation for the enhancement of the state's aviation programs.



Aviation Development Task Force Findings

- **Funding Issues:** Funding is far less than needs; needs have evolved
- **Economic Impact:** Return on Investment is tremendous - need advocacy group
- **Military Contribution:** NC is doing a good job retaining and recruiting
- **DoA Processes:** Complicated state and federal requirements, inadequate staffing, communication limitations



Task Force Preliminary Recommendations

- **Funding Issues:** Aviation tax recovery and reinvestment, a sustainable funding stream should be created
- **Economic Opportunities:** Enhance community college programs, EDPNC involvement, marketing and education
- **Military Contribution:** Database of retired vets, additional tax exemptions on military income, maximize military use of existing airports
- **Agency Processes:** Creation of Aviation Commission, training for airports statewide, continuation of Working Group efforts



Current O&M Projects

Source of Data	General Aviation Airports	Commercial Service Airports
Airport Requests	\$504M / 10 Years or \$50M / 1 Year	\$667M / 5 Years or \$133 / 1 Year
2014 NC Airports System Plan	\$1.07B / 20 Years or \$53M / 1 Year	Not Studied
Totals	\$51M	\$133M



Current Annual Funding

Source of Funds	General Aviation Airports	Commercial Service Airports
State Aid	\$18M	\$11M
FAA	\$18M	\$55M
Totals	\$36M	\$66M

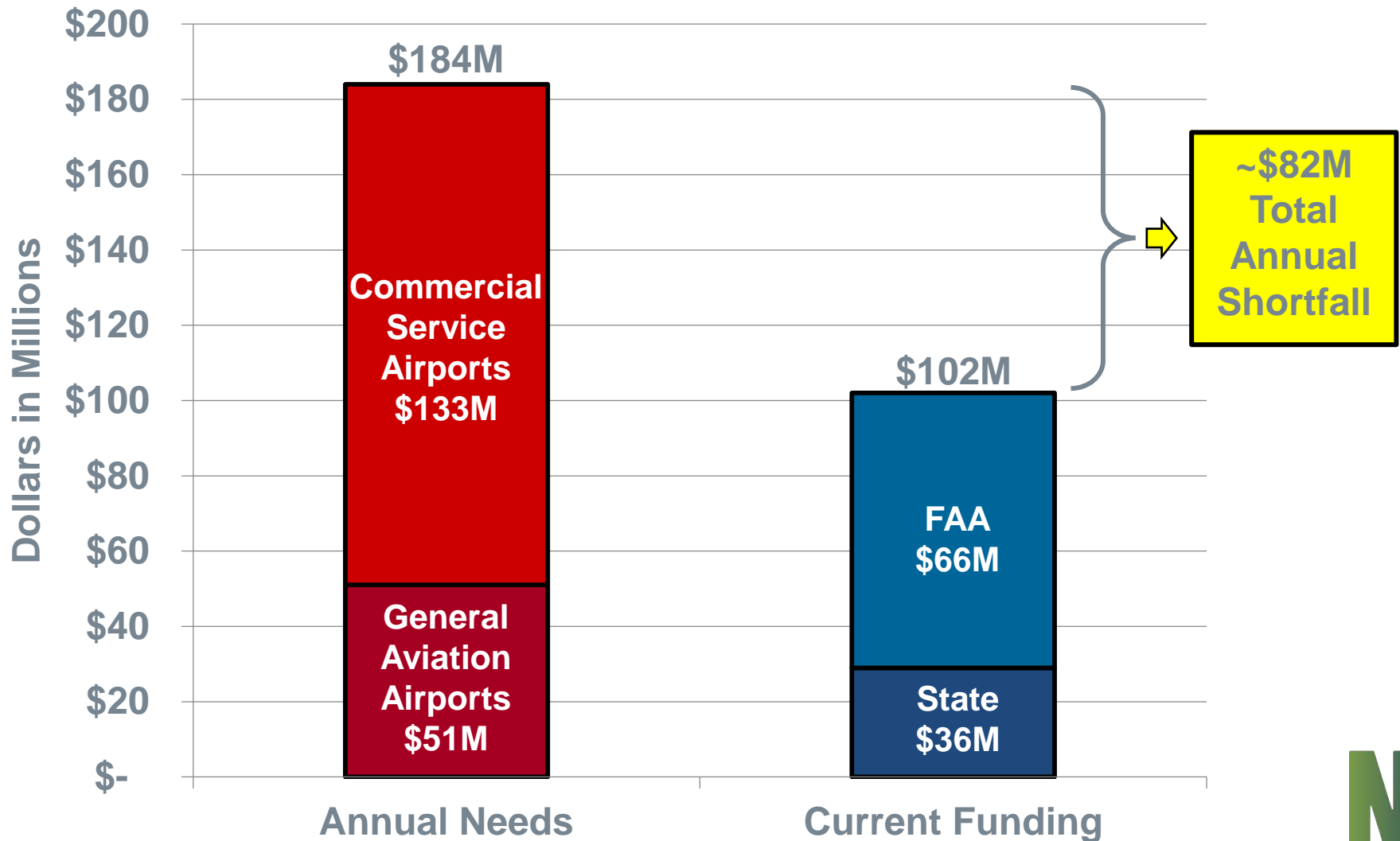


O&M Funding Shortfall

	General Aviation Airports	Commercial Service Airports
Current O&M Projects	\$51M	\$133M
Current Funding (State & FAA)	\$36M	\$66M
Totals	-\$15M	-\$67M



NC Airports Annual Funding Gaps



Current Funding based on FY 2016 State Funding and FY 2015 FAA Funding



Discussion

